

Notice of Allowability

Application No.

10/081,417

Examiner

Anthony Mackowey

Applicant(s)

MOON ET AL.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to appeal brief filed 14 March 2007.
2. ☒ The allowed claim(s) is/are 1-3, 5-10, 12-16 and 18-22; renumbered 1-19.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Amend page 6, lines 4-6 of the specification to recite,

Serial Number 10/062066, now U.S. Patent 6,985,642, entitled "IMAGE SIZE REDUCTION METHOD AND SYSTEM," filed January 31, 2002 by Prakash, which is hereby incorporated by reference.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

In view of the arguments presented with the Appeal Brief filed 14 March, 2007 and a further examination of the prior art, specifically multigap MICR read heads, the rejection under 35 U.S.C. 112, first paragraph and objection to the specification under 35 U.S.C. 132(a) have been withdrawn. Newly cited references US 4,457,015 and US 4,490,850 both the Nally et al. disclose MICR systems in which multigap read heads produce magnetic "images" of the character. From these disclosures it is clear a MICR system employing a multigap read head obtains an image of the character to be recognized and although the direct output of the read head is an analog signal, it is converted to an image bit map for recognition by the MICR algorithm (Fig. 1, Background and Summary, columns 1 and 2 of both Nally references).

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Therefore, as evidenced by the Nally references, the conversion of the plurality of waveforms obtained by the read head to bit map image data is well known in the art of MICR and can be considered inherent to system employing multigap read heads. Furthermore, the optical character reader and a multigap (MICR) read head both obtain bit maps of the characters and therefore the current application is sufficient to enable a person of ordinary skill in the art to implement the invention without undue experimentation.

Claim 1 recites, "an optical character reader system for collecting character data by electro-optically scanning printed characters; a conversion system for converting the character data to a Magnetic Ink Character Recognition (MICR) format from a non-MICR format; and a recognition engine for interpreting the converted character data using a MICR algorithm; wherein the conversion system scales the character data to a pel density associated with data obtained by a character recognition device using a multigap MICR read head."

Claims 8, 15 and 21 similarly recite these features.

The above features, as explicitly recited, are neither disclosed nor suggested by the closest prior art of record. US 5,091,968 to Higgins et al. (previously cited) discloses a character recognition system which optically captures magnetic ink characters, performs binarization of the gray scale images and performs a scaling operation for recognition of MICR characters using a template algorithm. However, Higgins does not disclose scaling the character data to a pel density associated with data obtained by a character recognition device using a multigap read head. Higgins removes columns from the optically captured E13B character data before recognition, therefore the converted characters are not considered to be in a MICR format as

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conventionally known in the art of magnetic ink character recognition employing multigap read heads.

Claims 2, 3, 5, 6, and 7 depend from claim 1; claims 9, 10, 12, 13, 14 depend from claim 8; claims 16, 18, 19, 20 depend from claim 15; and claim 22 depends from claim 21 and therefore incorporate all the limitations of the base claims and any intervening claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

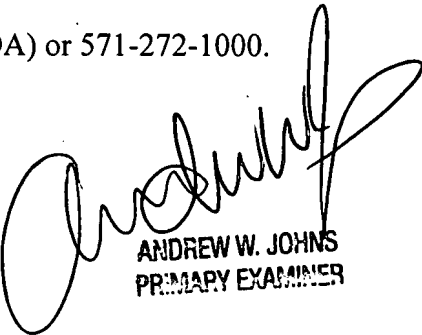
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Mackowey whose telephone number is (571) 272-7425. The examiner can normally be reached on M-F 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bella Matthew can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AM
7/8/07



ANDREW W. JOHNS
PRIMARY EXAMINER